In the Specification:

Page 1 line 18 - page 2 line 4, please amend the paragraph as follows:

Pressure swing adsorption (PSA) is a process for separating ~~gasses~~ gases from gas mixture, such as air. The pressure swing adsorption process is now well known as a very effective way to produce concentrated oxygen from the air. In a pressure swing adsorption process, the ambient air is pumped into a sieve tank that is typically fabricated of an airtight container filled with a molecular sieve material, such as Zeolite. For the separation of individual ~~gasses~~ gases in the air, the pressure conditions in the sieve tank should be controlled precisely. However, in a conventional way to control the pressure conditions in the sieve tank, electromagnetic valves or other types of valves, such as rotatory valves have been widely used for fluid control of the air to switch the pressure conditions in the sieve tank.

Page 5 line 7 - 20, please amend the paragraph as follows:

The mounting bracket (11) is mounted on the sieve tank (20) and has an inner space (not numbered), an intake air entrance (101) and an exhausting exit (102). The intake air entrance (101) is adapted to connect to a compressed air source (103), such as an air compressor (not shown) where the compressed air source

(103) is shown in schematic symbol in the following drawings. The valve actuator is mounted on the mounting bracket (11) and is implemented with a motor (111), a rotating shaft (112) and five cams (113) corresponding to the cam-actuated flow control valves. The ~~rotor~~ motor (111) can be a stepping motor (also called stepper motor) and is mounted on the mounting bracket (11). The rotating shaft (112) is mounted in the inner space of the mounting bracket (11), connects to the motor (111) and is rotated by the motor (111). The cams (113) are attached to the rotating shaft (112) and are rotated by the rotating shaft (112) to actuate precisely the corresponding cam-actuated flow control valves (131, 132, 133, 134, 135) in order according to a timing diagram illustrated in FIG. 2.

Page 7 line 18 - page 8 line 20, please amend the paragraphs as follows:

Meanwhile, the fifth valve (135) is also opened. The pressure in the second molecular sieve bed (22) will tend to be equalized with atmospheric pressure so that the molecular sieve material in the second molecular sieve bed (22) will release or purge the nitrogen that has been trapped during the previous step. Meanwhile, a small amount of purified oxygen in the oxygen storage bed (23) will come into the second molecular sieve bed (22) through the throttling valve (137) between the two beds (22,

23) to purge and vent the nitrogen to the atmosphere via the exhausting exit (102) because of pressure difference between the two beds (22, 23) and a flow limitation caused by the throttling valve (137). The remained purified oxygen in the oxygen storage bed (23) can be directed to the concentrated oxygen outlet tubing (231) to provide a person concentrated oxygen. At this situation, the second molecular sieve bed (22) is now maintained in a so-called "~~desorbtion~~ desorption phase" that the molecular sieve material is revived to have a capability of trapping the nitrogen ~~form~~ from the air.

With reference to FIGS. 2 and 4, in the next step, the cams (113) are now to be continuously rotated at an angle of 165° related to their initial positions, and the pressure conditions in the molecular sieve beds (21, 22) and the oxygen storage bed (23) are indicated by a line 4 shown in FIG. 2. The fifth valve (135) is closed now, and instead, the third valve (133) is opened. The compressed air flows continuously into the first molecular sieve bed (21) to produce rapidly the oxygen-rich product that is stored in the oxygen storage bed (23). Since the pressure in the first molecular sieve bed (21) is much higher than the pressure in the second molecular sieve bed (22), a small amount of the purified oxygen in the first molecular sieve bed ~~(221)~~ (21) will simultaneously ~~direct~~ be directed into the second molecular sieve bed (22) to pressurize the same as the third

valve (133) is opened. In this situation, the second molecular sieve bed (22) is maintained in a so-called "balance phase".

Page 9 line 15 - page 11 line 1, please amend the paragraphs as follows:

With reference to FIGS. 2 and 6, the next step is to further rotate the cams (113) to an angle of 270° related to the initial positions, and the pressure conditions in the molecular sieve beds (21, 22) and the oxygen storage bed (23) are indicated by a line 6 shown in FIG. 2. Likewise, the third valve (133) is now closed, and instead the first valve (131) is opened to allow the first molecular sieve bed (21) to communicate with the atmosphere. The compressed air comes continuously into the second molecular sieve bed (22) that is going to become the adsorption phase. The nitrogen of the incoming compressed air is trapped by the molecular sieve material in the second molecular sieve bed (22) while the oxygen of the incoming compressed air is allowed to flow through as previously described.

Meanwhile, a small amount of the purified oxygen in the second molecular sieve bed (22) is directed into the oxygen storage bed (23) to become the oxygen-rich product. Since the first molecular sieve bed (21) is communicated with the atmosphere, the pressure in the first molecular sieve bed (21) is going to be equalized with the atmospheric pressure that means

the first molecular sieve bed (21) is changed to the ~~desorbtion~~ desorption phase. The trapped nitrogen will be released or desorbed by the molecular sieve material in the first molecular sieve bed (21) as the pressure is falling. Also, a small amount of the oxygen-rich product in the oxygen storage bed (23) is redirected into the first molecular sieve bed (21) to purge the first molecular sieve bed (21) because of the pressure difference. The released nitrogen is mixed with the oxygen-rich product, and the mixture is eventually exhausted into the atmosphere as previously described. Therefore, the molecular sieve material in the first molecular sieve bed (21) is revived to have a capability of trapping the nitrogen.

In effect, the pressure conditions of the first and the second molecular sieve beds (21, 22) shown in the FIGS. 3 and 6 are converse actions. The pressure conditions of the first molecular sieve bed (21) illustrated in FIG. 3 are initially maintained in the adsorption phase, but are switched to enter into the ~~desorbtion~~ desorption phase illustrated in FIG. 6. Likewise, the pressure conditions of the second molecular sieve bed (22) illustrated in FIG. 3 are initially maintained in the ~~desorbtion~~ desorption phase, but are switched to enter the adsorption phase illustrated in FIG. 6. The alternate changes of the pressure conditions between the two molecular sieve beds (21, 22) cause the oxygen ~~contractor~~ concentrator to produce repeatedly the oxygen.

Page 11 line 18 - page 12 line 4, please amend the paragraphs as follows:

Since the cam-actuated flow control valves are actuated to be opened and closed, the timing of pressurization that introduces compressed air into the molecular sieve beds (21, 22) can be precisely controlled. Also, the pressure conditions of the three beds (21, 22, 23) can be switched timely. A smaller amount of the molecular sieve materials is required to produce the concentrated oxygen than in the prior art. With a smaller amount of the molecular sieve materials [[is]] needed than the prior art, the oxygen concentrator can be fabricated with a compact size to reduce the manufacturing cost and weight of the oxygen concentrator. In addition, since the cam-actuated flow control valves change gradually their position to different ways, the noise generated is smaller so that the oxygen concentrator is quiet.